

CSC 750-001

## **Group Formation and Problem Description**

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## Abstract and Goal

The midwestern United States is not nearly as well-supported with robust public transportation options as cities on both coasts do. In Springfield, you could argue that the best mode of public transit is Missouri State's BearLine. Furthermore, no passenger train service serves Springfield, MO at present. Therefore, we thought it would be appropriate to develop a project to better support the United States' current public transportation infrastructure, perhaps bringing to light the importance of having robust multimodal public transit throughout the country.

Amtrak is the United States' main passenger train service, serving many areas nationwide. However, this service is not as well-known outside of the Northeast Corridor (NEC), where the service is used more frequently, and is better-supported. We think that publicizing the frequency of train service, where they're going, and their timetables in an interactive application would do a great deal in making Amtrak's service more accessible to the general public.

## Planned Platform

We're planning on developing this project using JavaScript to create and customize the website, along with HTML/CSS to style the website as necessary.

## Objectives

- To track status of Amtrak trains, providing data about the train's scheduled and actual departure and arrival times to and from each station
- To create a rich graphical user interface that makes the user experience as simple as possible to access the information provided by Amtrak's APIs
- To make a web application that can be compatible with several devices, regardless of the operating system and hardware being used